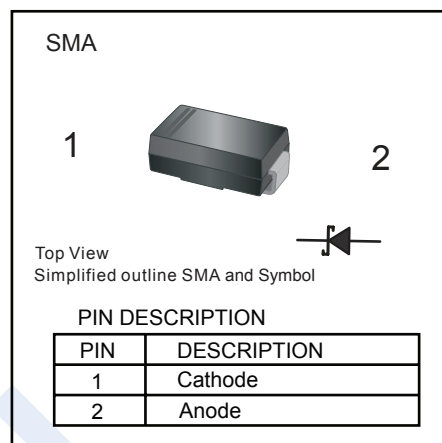


## Schottky Diodes

### 1KK2302A ~ 1KK2320A

#### ■ Features

- Reverse Voltage - 20 to 200 V
- Forward Current - 3.0 A
- Metal silicon junction, majority carrier conduction
- For surface mounted applications
- Low power loss, high efficiency
- High forward surge current capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications



#### ■ Absolute Maximum Ratings and Electrical characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	1KK 2302A	1KK 2304A	1KK 2306A	1KK 2308A	1KK 2310A	1KK 2312A	1KK 2315A	1KK 2320A	Unit	
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	20	40	60	80	100	120	150	200	V	
Maximum RMS voltage	$V_{RMS}$	14	28	42	56	70	84	105	140		
Maximum DC Blocking Voltage	$V_{DC}$	20	40	60	80	100	120	150	200		
Maximum Instantaneous Forward Voltage at 3A	$V_F$	0.55		0.70		0.85		0.95		A	
Maximum Averaged Forward Rectified Current	$I_{F(AV)}$	3.0									
Peak Forward Surge Current, 8.3 ms Single Half Sine Wave Superimposed on Rated Load	$I_{FSM}$	80									
Maximum DC Reverse Current $T_a=25^\circ\text{C}$ at rated DC blocking voltage $T_a=100^\circ\text{C}$	$I_R$	0.5			0.3			3			mA
		5			3						
Typical Junction Capacitance *1	$C_j$	450			400						pF
Typical Thermal Resistance *2	$R_{\theta JA}$	70									°C/W
Operating Junction Temperature Range	$T_j$	-55 ~ +125									°C
Storage Temperature Range	$T_{stg}$	-55 ~ +150									

\* 1 Measured at 1MHz and applied reverse voltage of 4V D.C.

\* 2 P.C.B. mounted with 2.0" × 2.0" (5×5 cm) copper pad areas.

#### ■ Marking

NO.	1KK 2302A	1KK 2304A	1KK 2306A	1KK 2308A	1KK 2310A	1KK 2312A	1KK 2315A	1KK 2320A
Marking	3A02	3A04	3A06	3A08	3A10	3A12	3A15	3A20

# Schottky Diodes

## 1KK2302A ~ 1KK2320A

■ Typical Characteristics

Fig.1 Forward Current Derating Curve

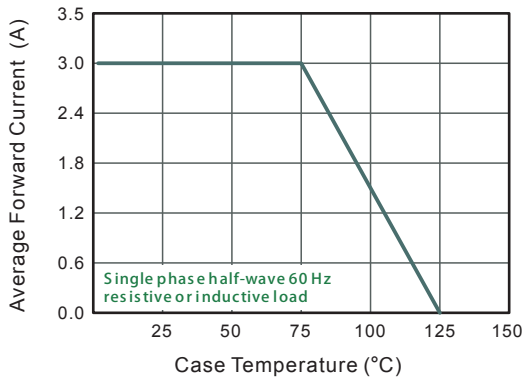


Fig.2 Typical Reverse Characteristics

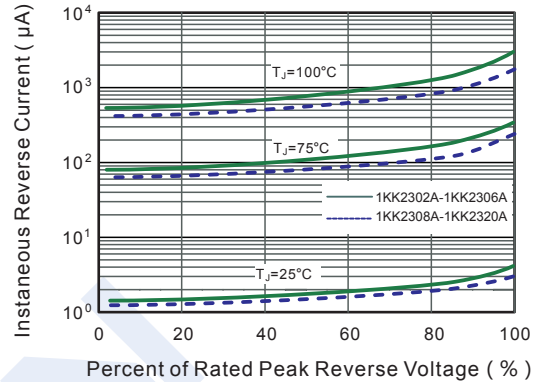


Fig.3 Typical Forward Characteristic

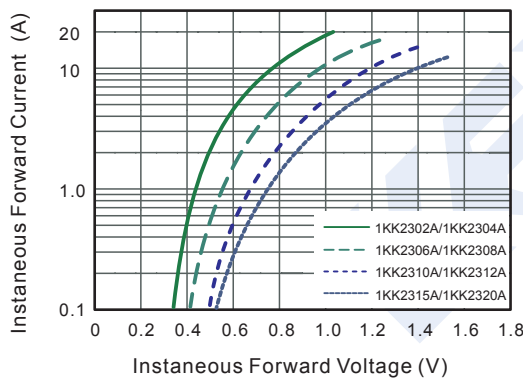


Fig.4 Typical Junction Capacitance

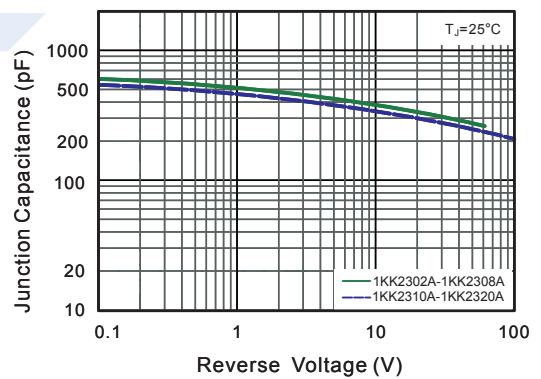


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

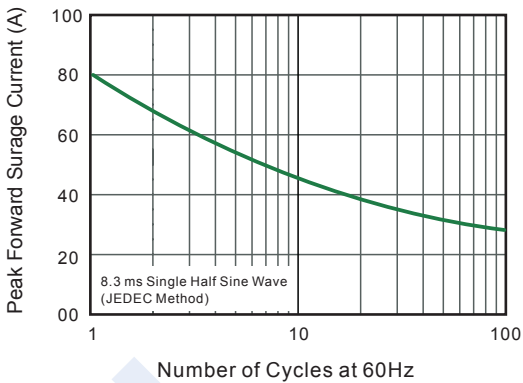
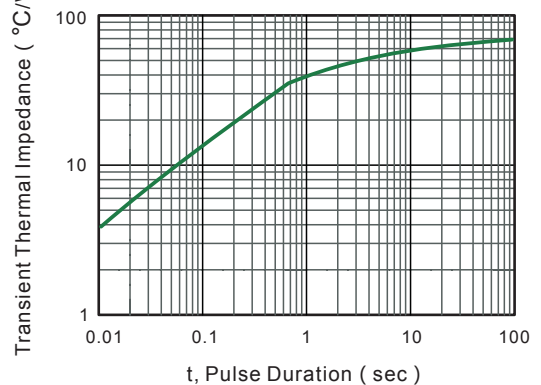


Fig.5- Typical Transient Thermal Impedance

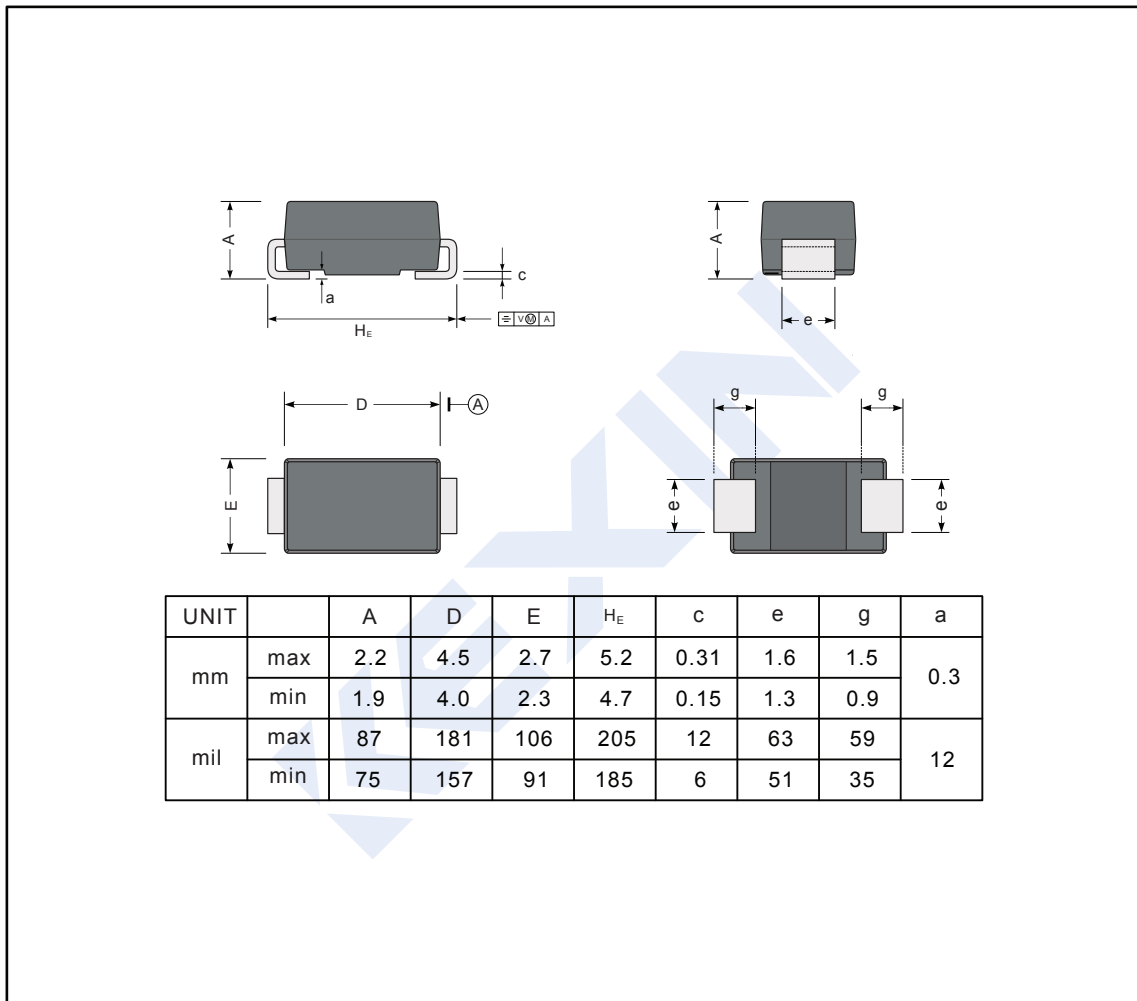


## Schottky Diodes 1KK2302A ~ 1KK2320A

■ Package Outline Dimensions

Plastic surface mounted package; 2 leads

SMA



■ The recommended mounting pad size

